



WASHINGTON STATE LEGISLATURE  
**Office of the State Actuary**

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TO: Steve Nelsen, Executive Director  
LEOFF 2 Retirement Board

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Office of the State Actuary

CC: Matt Smith, FCA, EA, MAAA, State Actuary  
Office of the State Actuary

RE: **LEOFF 2 DUTY-DEATH SURVIVOR MEDICAL AND DENTAL  
BENEFITS**

This memo presents the results of pricing the proposed medical and dental benefits for survivors of members following duty-related deaths. The eligibility for this proposed benefit is the same as the eligibility for the existing \$150,000 duty-death benefit. Currently, survivors of members killed in the line of duty have access to medical benefits through the Public Employees Benefits Board (PEBB) at their own expense. This proposal would provide 100 percent of the PEBB medical and dental premiums for duty-death survivors for life and dependents while eligible.

The proposal would increase contribution rates by a total of 0.06 percent (employee 0.03 percent, local employer 0.02 percent, state 0.01 percent) and have a total employer cost of \$0.8 million for 2007-2009.

**Members Impacted**

We expect an average of approximately three duty-related deaths per year. Our current assumed duty-related death rate is 0.0002 for all ages; or two duty-related deaths for every 10,000 active members. We assume that there are approximately 24 current survivors as the result of prior duty-related deaths. A typical survivor impacted by this proposal would receive medical benefits with a current value of \$308 to \$859 per month plus dental benefits with a current value of \$44 to \$87 per month depending on age and family status.

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## Assumptions

We assumed that the eligibility requirement would be the same as the current eligibility requirement for the \$150,000 duty-death benefit. We assumed that 100 percent of active members were married. We used the duty-death assumption of 0.002 at all ages for the pre-retirement mortality assumption. We assumed that survivors would elect the most expensive medical plan under PEBB, which is currently Regence Blue Shield. We assumed survivors would elect the most expensive dental plan, which is currently Regence Blue Shield: Columbia Dental Plan. We assumed that PEBB premiums would decrease at age 65 because survivors would be enrolled in Medicare at age 65. We assumed that future survivors and half of the survivors in pay status would elect coverage for the subscriber and children for the first ten years and the subscriber only thereafter. We assumed that the other half of the survivors in pay status would elect coverage for the subscriber only.

<b>2006 PEBB Retiree Monthly Premiums: Regence Blue Shield*</b>			
	<b>Medical</b>		<b>Dental</b>
	<b>Pre-Medicare</b>	<b>Enrolled in Medicare</b>	<b>Before/After Medicare</b>
<b>Subscriber Only</b>	\$493.87 / month	\$308.45 / month	\$43.46 / month
<b>Subscriber and Children</b>	\$858.54 / month	\$673.12 / month	\$86.92 / month

\* Full dental plan name is Regence Blue Shield: Columbia Dental Plan.

We assumed that the trend rate for medical inflation is 13.5 percent the first year, decreasing by 1.0 percent per year to an ultimate rate of 3.5 percent. The remaining assumptions were the same as those discussed in the 2004 actuarial valuation report for the pension plan.

To approximate the number of current duty-death survivors, we derived an estimated 24 survivors by starting with two methods to develop a best-estimate range of 9-42 survivors, then selected the number 24 near the midpoint of the range as our best single-point estimate. The low end of the range was based on the number of duty-death survivors currently in PEBB. The high end of the range was derived by retroactively applying our duty-death assumption since the inception of the plan. Additionally, our data shows 19 survivors receiving annuities from the pension plan. To calculate the liability for the estimated five unknown current duty-death survivors, we took the ratio of  $(24/19 - 1)$  times the liabilities for medical benefits in PEBB for the 19 known survivors in the data. We assumed that the medical benefits would be paid for the surviving spouse and dependent children and not for future spouses if surviving spouses remarry.

## Costs

The proposal will impact the actuarial funding of LEOFF 2 by increasing the present value of benefits payable under the plan and the required actuarial contribution rate as shown below:

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<b>Cost Summary</b>			
<b>\$ in Millions</b>	<b>Current</b>	<b>Increase</b>	<b>Total</b>
<b>Increase in Present Value of Fully Projected Benefits</b>	\$4,800	\$8	\$4,808
<b>Increase in Present Value of Unfunded Credited Projected Benefits</b>	(\$426)	\$6	(\$420)

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<b>Increase in Contribution Rates:</b>	
<b>(Effective 9/1/2006)</b>	
<b>Current Members</b>	
Employee	0.03%
Employer	0.02%
State	0.01%
<b>New Entrants*</b>	
Employee	0.02%
Employer/State	0.02%

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*\*Rate change applied to future new entrant payroll and used for fiscal budget determinations only. A single supplemental rate increase, equal to the increase for current members, would apply initially for all members or employers.*

As a result of the higher required contribution rate, the increase in funding expenditures is projected to be:

<b>Duty-Death Medical Benefits</b>	
<b>Costs (in Millions)</b>	
<b>2006-2007</b>	
<b>State:</b>	
General Fund	\$0.1
Non-General Fund	<u>\$0.0</u>
<b>Total State</b>	<b>\$0.1</b>
Local Government	\$0.2
Total Employer	\$0.3
Total Employee	\$0.3
<b>2007-2009</b>	
<b>State:</b>	
General Fund	\$0.2
Non-General Fund	<u>\$0.0</u>
<b>Total State</b>	<b>\$0.2</b>
Local Government	\$0.6
Total Employer	\$0.8
Total Employee	\$0.8
<b>2006-2031</b>	
<b>State:</b>	
General Fund	\$5.9
Non-General Fund	<u>\$0.0</u>
<b>Total State</b>	<b>\$5.9</b>
Local Government	\$10.0
Total Employer	\$15.9
Total Employee	<u>\$15.9</u>

These estimates are based on assumptions regarding the current number of duty-related survivors, the medical plans selected, the number of dependents covered, and health care inflation. The actual costs will be different if these assumptions are not realized.